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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,055

03/02/2004

Robert J. Sexton

77335-0098

9816

29052

7590

07/26/2006

SUTHERLAND ASBILL & BRENNAN LLP
999 PEACHTREE STREET, N.E.
ATLANTA, GA 30309

EXAMINER

MAYO III, WILLIAM H

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

**SUPPLEMENTAL
Notice of Allowability**

Application No.

10/790,055

Examiner

William H. Mayo III

Applicant(s)

SEXTON ET AL.

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to July 11, 2006.
2. ☒ The allowed claim(s) is/are 1-3,5-39,41 and 42.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Rhett White on July 13, 2006.
3. The application has been amended as follows:

A) On Page 11, lines 3-4. Please replace the description of FIG. 7 with the following amended description:

Figure 7 illustrates ~~a method 700 of fabricating an electrical wire~~ that can be considered as forming a series of capacitors with an equivalent capacitive circuit according to the exemplary embodiments of the present invention;

B) On Page 12, line 8. Please replace "than" with "that" so the sentence beginning on line 8 reads:

It should be noted ~~than~~ that unless otherwise noted, any of the layers (e.g., conductors, insulating layers, etc.) in the present invention and discussed herein may be formed of a plurality of layers.

C) On Page 13, lines 9-20. Please replace the paragraph at lines 9-20 with the following amended paragraph:

As further illustrated, the first and second return conductors 221 are formed such that the at least one electrifiable conductor is at least substantially entrapped (e.g., enveloped, surrounded, encased) by the first and second return conductors. By "substantially entrapped" it is meant that for all practical purposes, the electrifiable conductor 210 cannot be contacted with a foreign object (e.g., a nail, screw, staple, etc.) without first touching the one of the return conductors ~~[[220]]~~ 221. The term "substantially entrapped" does not necessarily mean that the return conductors ~~[[220]]~~ 221 completely surround the electrifiable conductor (although such a design is possible). Instead, it means that any distance between the return conductors and the electrifiable conductor (e.g., the thickness of an insulating layer between the electrifiable conductor and a return conductor) is so small (e.g., about 0.030" or less) that such a foreign object cannot reasonably go between the return conductors and the electrifiable conductor without touching the return conductors.

D) Page 24, lines 8-10. Please replace the paragraph at lines 8-10 with the following amended paragraph:

As illustrated in Figure 3C, the conductors (e.g., ~~grounding conductor 222~~ Electrifiable conductor 210) may be folded over on themselves. Further, as illustrated in

Figure 3D, another conductor (e.g., return conductor 221) may be folded over a folded conductor (e.g., Electrifiable conductor 210).

Allowable Subject Matter

4. Claims 1-3, 5-39, and 41-42 are allowed.
5. The following is an examiner's statement of reasons for allowance: This invention deals with an electrical wire comprising at least one electrifiable conductor and first and second return conductors formed on opposing sides of the at least one electrifiable conductor, wherein the at least one electrifiable conductor is entrapped by the first and second conductors, wherein a distance between the at least one electrifiable conductor and each of the first and second return conductors is no greater than approximately 0.030 inches (claims 1, 10, & 24). This invention deals with a method of forming an electrical wire comprising forming at least one electrifiable conductor, forming first and second return conductors formed on opposing sides of the at least one electrifiable conductor, wherein the at least one electrifiable conductor is entrapped by the first and second conductors, wherein a distance between the at least one electrifiable conductor and each of the first and second return conductors is no greater than approximately 0.030 inches (claim 30). This invention also deals with an electrical wire comprising at least one electrifiable conductor and first and second return conductors formed on opposing sides of the at least one electrifiable conductor, wherein the at least one electrifiable conductor is entrapped by the first and second conductors, wherein a total thickness of the electrical wire is no more than approximately 0.050 inches (claims 41 &

42). The above stated claim limitations, in combination with other claim limitations, is not taught or suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Drawings

6. The drawings were received on July 11, 2006. These drawings are approved.

Response to Arguments

7. Applicant's arguments filed March 3, 2006 have been fully considered and they are persuasive. Specifically, the Declaration filed under 37 CFR 1.132 detailed expected results and why it would not have been obvious to one of ordinary skill in the art to modify the teachings of Champeau (US Pat Num 5,068,632) with the teachings of Farquhar (US Pat Num 5,874,324) to provide Champeau with the thickness and configuration of the flat cable, is persuasive and therefore the claims have been allowed.

Communication

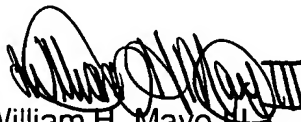
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-

Art Unit: 2831

272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
July 14, 2006

approved
with
7/14/06

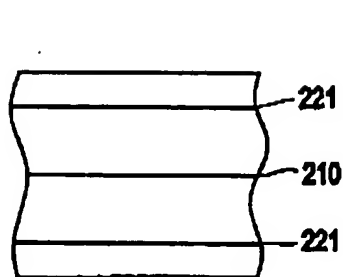


FIG. 3A

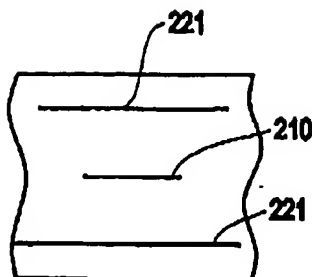


FIG. 3B

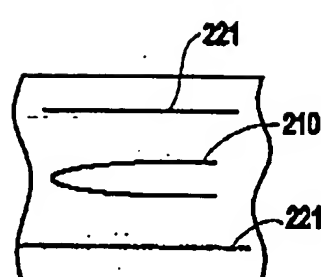


FIG. 3C

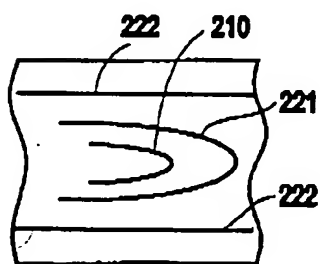


FIG. 3D

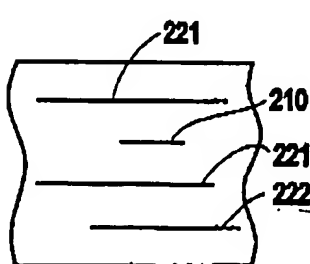


FIG. 3E

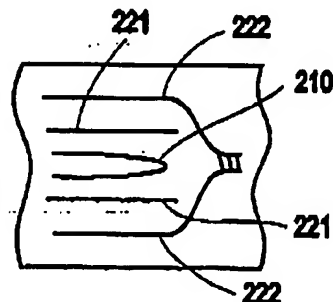


FIG. 3F

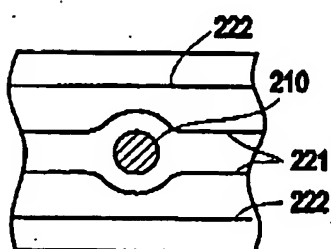


FIG. 3G

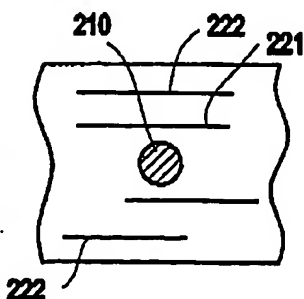


FIG. 3H

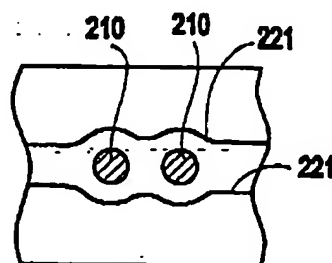


FIG. 3I